

what type of reformulated gasoline you are using, you may not need to add a fuel line deicer. If you are using reformulated gasoline that contains ethanol, you do not need to add a fuel line deicer. In fact, manufacturers discourage the use of fuel line deicers with ethanol blended reformulated gasoline because the ethanol in the reformulated gasoline already prevents fuel line icing. For reformulated gasoline that does not contain ethanol, fuel line deicers are still appropriate. If you have a question about whether the reformulated gasoline you are purchasing contains ethanol, first check the gas pump for a label, or ask the service station attendant. For further information on fuel line deicers consult your owners manual or see your dealer.

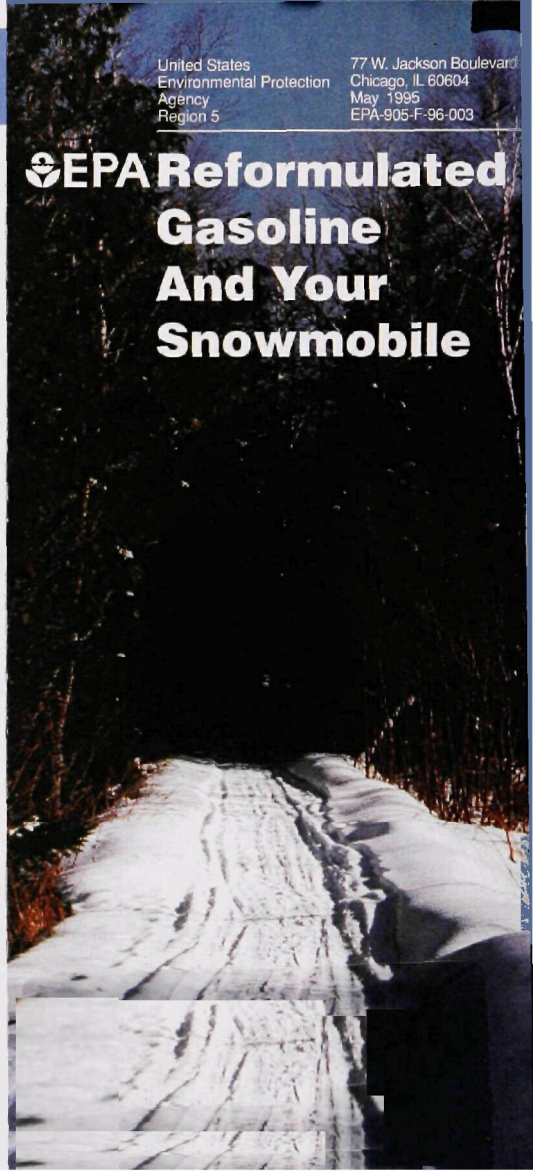
Check hoses for deterioration at least once a year. Over time, all gasolines have changed in the way they are formulated. These changes have caused a situation where gasoline made today is less compatible with materials used in older snowmobiles. Therefore, some materials in older sleds, in particular rubber hoses, may deteriorate, or breakdown, more quickly when using reformulated gasoline or conventional gasoline. Because of these material incompatibility concerns, it is recommended that hoses, and other rubber components exposed to fuel, should be inspected once a year.

Remember that by using reformulated gasoline you are improving the air you breathe.

**For more information, call, toll-free:
U.S. EPA, 800-621-8431**

United States
Environmental Protection
Agency
Region 5

77 W. Jackson Boulevard
Chicago, IL 60604
May 1995
EPA-905-F-96-003



EPA Reformulated Gasoline And Your Snowmobile

REFORMULATED GASOLINE AND YOUR SNOWMOBILE

What is reformulated gasoline?

As of January 1, 1995, every time you fill up your tank with gasoline, you are helping protect the quality of the air you breathe. By doing so, you will become part of one of the nation's most important strategies to reduce pollution from motor vehicles.

Over five years ago, the U.S. Environmental Protection Agency (EPA) began working cooperatively with the petroleum and engine manufacturing industries to reformulate gasoline to reduce emissions of ozone-forming and toxic air pollutants. The result—a cleaner-burning gasoline, called reformulated gasoline, which has significant health benefits.

Scientifically speaking, reformulated gasoline is very similar to conventional gasoline. In fact, reformulated gasoline is just one out of hundreds of different formulations for making gasoline. *The ingredients used to make reformulated gasoline* are no different from those used to make conventional gasoline. Reformulated and conventional gasoline differ only in the levels of ingredients. Specifically, reformulated gasoline has lower amounts of certain compounds that contribute to air pollution; it does not evaporate as readily as conventional gasoline during the summer months; and it contains "chemical oxygen" (oxygenates).

Who is using reformulated gasoline?

The Clean Air Act requires the nine cities with the worst levels of ozone pollution to use reformulated gasoline. The cities include New York, Philadelphia, Hartford, Baltimore, Chicago, Milwaukee, Houston, San Diego, and Los Angeles.

In addition, dozens of other cities are voluntarily using reformulated gasoline simply because it's a convenient, inexpensive way to improve air quality. In all, about one-third of the gasoline in the country is reformulated.

What are the benefits of reformulated gasoline?

Compared with conventional gasoline, reformulated gasoline has 3 primary health benefits. In the summertime, reformulated gasoline reduces vehicle emissions of pollutants that form ground-level ozone, often called smog. In the wintertime, reformulated gasoline reduces carbon monoxide emissions from vehicles. And year-round, reformulated gasoline reduces toxic air pollutants.

Ozone damages sensitive lung tissue and reduces lung function. Elevated levels of carbon monoxide *cause impairment of vision, breathing, and alertness*, as well as aggravating existing heart conditions. Exposure to toxic air pollutants has been linked to increased rates of cancer.

Reformulated gasoline produces 15 to 17 percent less pollution than conventional gasoline, and further improvements are expected as new formulas are developed.

This year, the new, cleaner gasoline will reduce smog-producing emissions by more than 300,000 tons—the equivalent of removing 8.1 million cars from our roads.

Can you use reformulated gasoline in your snowmobile?

Snowmobile engine manufacturers have stated that the use of reformulated gasoline in their engines is

acceptable, although some offer special instructions if you use reformulated gasoline.

As a snowmobile owner or operator, there are a number of simple things you can do if you are concerned about using reformulated gasoline in your snowmobile engine.

How to make sure that your snowmobile engine operates properly on reformulated gasoline:

Make sure that your engine is properly tuned.

The best thing you can do to ensure that your snowmobile engine will operate properly on reformulated gasoline is to have your engine tuned-up. While reformulated gasoline is very similar to conventional gasoline, there are several very important differences. Because of these differences it is likely that your snowmobile will need to be recalibrated. Recalibration can be done as part of a tune-up by your dealer. For further details please check with your dealer.

Use good tank management techniques.

All gasoline has a limited storage life and reformulated gasoline is no exception. Therefore, when storing your snowmobile for more than 60 days, make sure that the gas tank is completely empty, regardless of which type of gasoline you are using. Also it is a good idea to remove any gasoline in the fuel system by operating the engine until it stops. Taking this precaution will minimize the risk of fuel breakdown when you store your snowmobile for long periods in the off-season.

Be aware of what type of fuel you are using when adding fuel line deicers. Depending upon